

DART
AEROSPACE
S015268

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1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
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Mirror 6"

PART NO: D2011-101
Revision:
Operation: Packaging
Change No:

Mfg Date: 11/29/17 Job No: 168307
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Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D2011-101
Job Sheet 168307



Part No: D2011-101

Job Qty: 12 ea

Part Name: Mirror 6"



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/13/17

Job Tracking No:

Due Date: 11/20/17

Created By: Linda Lacelle

Type: Stock

Description:

Customer: Paradise Helicopters (CPARA06)

73-341 U'U Street Kailua-Kona, HI, 96740 USA ph:(808) 329-8488

Note: DWG REV G IPP: J 04.09.15 Added Steps 5-7 KJ/JLM IPP: K 05.12.15 chg black sikaflex for white EC IPP L 08.11.06 new drawing EC verify: DD IPP: M 08.12.19 Added step 3 KJ Verified by: LL IPP rev N 10.01.13 added wrap per ncr09-118 EC verified by:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	12 pcs	11/18/17	11/18/17	0.00	0.00	Purchasing		Chm
110	Packaging	12 pcs	11/18/17	11/18/17	0.00	0.00	Packaging2		Chm
120	QC	12 pcs	11/18/17	11/18/17	0.00	0.00	QC6		38
130	Small Fab	12 pcs	11/20/17	11/20/17	0.00	1.36	Small Fab		9-89 DAS
140	QC	12 pcs	11/20/17	11/20/17	0.00	0.00	QC5		38
150	Packaging	12 pcs	11/20/17	11/20/17	0.00	0.00	Packaging3	5/585/	DAS 9-89
160	QC21-SA	12 Ea	11/20/17	11/20/17	0.00	0.00	QC21		21 DEC 8 9 2017

Part Op **100** - Issue P/O: 38404 Mirror P/N: 28663 supplier: B C INDUSTRIAL CL 17/11/17 (12)
 Descriptions: **110** - Ensure material certification is attached
130 - 1- Wrap mirror with plastic wrap 2- Discard Hardware & Install new hardware loosely 3- Crimp stud as per Dwg D2011
140 - 4- Test assembly to 50lbs pull test after 24 hours
160 - Mirror P/N: CHM10601 Possible supplier: Auto Parts Extra

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
100-Purchasing	CHM-10601	12	0	0	0
130-Small Fab	D2829 <u>F161725</u>	12	38	0	0
	D3014-1 <u>F102272</u>	12	59	0	0
	NAS1149D0416J <u>F1131511-1</u>	12	3,504	0	0

Part Specifications

Specifications could not be found.

Plex 11/14/17 7:52 AM dart.boucher.sylvie

DQA: _____ Date: _____



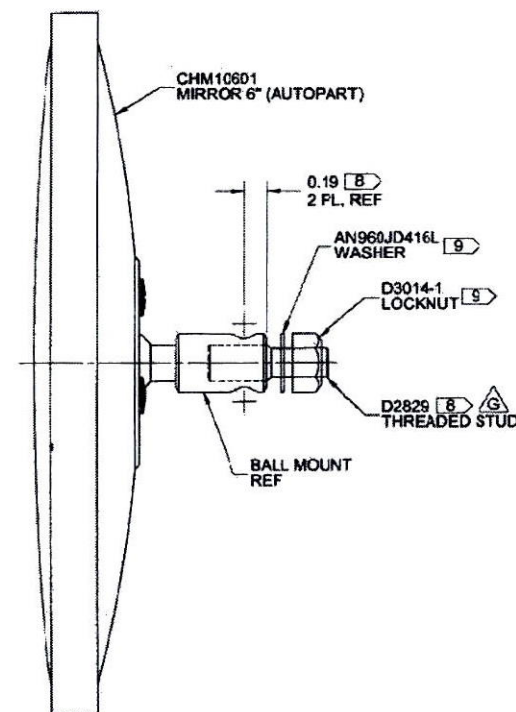
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

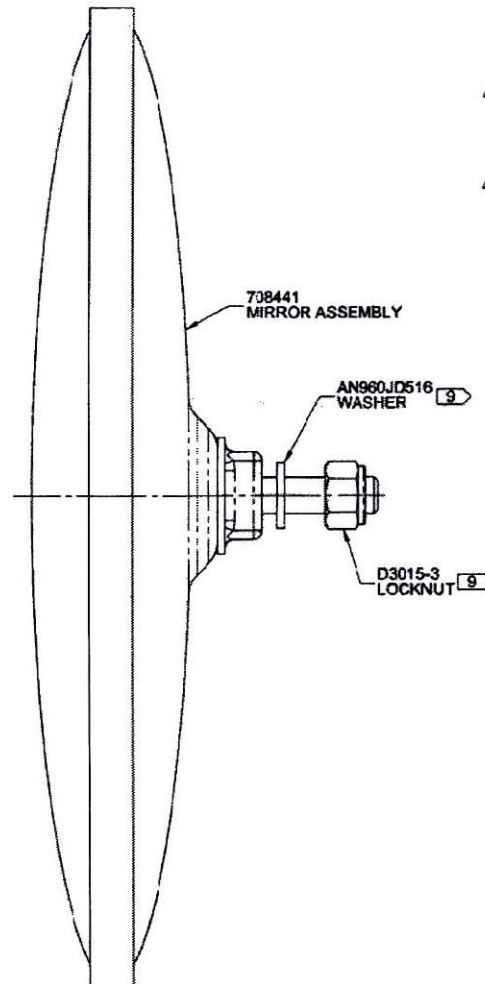
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

8 7 6 5 4 3 2 1



D2011-101 MIRROR ASSEMBLY 6"



D2011-103 MIRROR ASSEMBLY 8"

ITEM	QTY -101	QTY -103	P/N	DESCRIPTION
1	X		D2011-101	MIRROR ASSEMBLY 6"
2		X	D2011-103	MIRROR ASSEMBLY 8"
3	1		D2829	THREADED STUD
4	1		D3014-1	LOCKNUT
5		1	D3015-3	LOCKNUT
6	1		CHM10601	MIRROR 6" (AUTOPART)
7		1	708441	MIRROR 8" (VELVAC)
8	1		AN960JD416L	WASHER
9		1	AN960JD516	WASHER

RELEASED
06-10-29-11

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: D2011-101 = 0.6 lbs APPROX. ; D2011-103 = 1.0 lbs APPROX.
 - 8) D2829 INSTALLATION PROCEDURE:
 - APPLY LOCKTITE 282 TO Ø 5/16 END OF D2829
 - THREAD BY HAND INTO BALL MOUNT UNTIL ENTIRE Ø 5/16 END OF D2829 IS WITHIN BALL MOUNT
 - CRIMP BALL MOUNT ON TWO OPPOSING SIDES, 0.19 FROM END AS ILLUSTRATED USING TOOL DT8317
 - CRIMP TO DEPTH OF 0.040 ± 0.010 USING R0.125
 - 9) INSTALL LOOSE

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SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER
NO. 168307
DAE
30
9-89

NOV 16 2017

G	REDRAWN IN SOLIDWORKS TO CURRENT STANDARD AND TRANSFERRED TO "B" SIZE FORMAT. MIRROR 6" (AUTOPART) AND CHM10601 WERE MIRROR 6" (GROTE) AND P/N 28043 (Z1 D3-1); ADDED D2829 (Z1 D3-1) AND Z1 CS-1; REMOVED DRILLING NOTE, VIEW A-A AND SIKAFLEX APPLICATION NOTE. REASON: GROTE PRODUCT IS DISCONTINUED	MB	08-10-06
F	ADD HOLES FOR SEALANT ON -101	CP	04-09-10
E	NEW 6" MIRROR	CP	01-05-06
D	NEW 6" MIRROR, ADD NUT, REMOVED STUD	CP	01-04-23
C	REPLACE DOMINION AUTO MIRRORS WITH PHILLIPS, ADDED STUDS, REDRAWN	RF	99-06-01
B	SIKAFLEX 241 ADDED	JB	98-04-09
A	DWG NO. WAS DSP1011, ADDED -103	JB	90-06-15
-	NEW ISSUE	JB	90-03-31
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D2011 REV. G SHEET 1 OF 1 SCALE NTS COPYRIGHT © 1990 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED FOR ANY PURPOSE OR COMING OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
DRAWN	JB		
CHECKED	JB		
MFG. APPR.	JB		
APPROVED	JB		
DE APPR.	JB		
DATE	08.10.06		

Nov 27 2017

Packing Slip

PS171127DA

Livrer a/Ship to:

Dart Aerospace Ltd
1270 Aberdeen
Hawksbury, Ont
K6A 1K7

Votre PO# 38404

Description	Livrer/Ship	B/O
1. mirrors 28663 /	✓ 12	0

8017-11-28

Dr
38
9-86

BC Industrial.... 14 Old Forest....Kirkland, Quebec.. H9J2Z8
Phone 514-585-8907 bcpc1@videotron.ca

BC Industrial..... 14 Old Forest....Kirkland....Quebec....H9J-2Z8....Canada
Phone 514-585-8907 Email bcpci@videotron.ca

FACTURE/INVOICE

INV171127DA

Nov 27 2017

Ref Notre PS# PS171127DA

Votre PO# 38404

Vendu a

Dart Aerospace Ltd
1270 Aberdeen
Hawksbury, Ont
K6A 1K7

Description	Quan	Prix	Total
1. mirrors 28663	12	18.70	224.40

SPA-71-28

DA
38
9-8c

224.40

HST 29.17

TOTAL 253.57

#TPS/GST-14264062
#TVQ/PST-1021696907

Terms 2%10 Net 30

BC Industrial..... 14 Old Forest....Kirkland....Quebec....H9J-2Z8....Canada

Phone 514-585-8907

Email bcpci@videotron.ca

Certificate of Compliance

Nov 27 2017

Dart Aerospace Ltd
1270 Aberdeen
Hawksbury, Ont
K6A 1K7

Att: Chantal Lavoie

This is to confirm that the parts delivered on our

PS171127DA

mirror 28663

conforms to the specifications outlined on your purchase
order 38404

Thank you

Bryan Cameron

#TPS/GST-14264062

#TVQ/PST-1021696907

Terms 2%10 Net 30